

44. A method according to claim 43, wherein the surface relief pattern contains variations in at least one of pitch and amplitude of the corrugations.

45. A method of fabricating Bragg gratings in the interior of an optical waveguide comprising disposing a silica glass phase grating mask adjacent and a parallel to a photosensitive optical waveguide and applying a single collimating light beam through the phase grating mask to said optical waveguide as a medium, wherein the phase grating mask is configured so as to substantially suppress at least one portion thereof a zero-order diffracted light beam of the light beam which passes through the phase grating mask.

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cont
46. A method according to claim 45, wherein the zero-order diffracted light beam is suppressed to less than 5% of the light diffracted by the phase grating mask.

47. A method according to claim 45, wherein plus one and minus one orders of the diffracted light beam are utilized for fabricating the Bragg gratings in the interior of the optical waveguide.

48. A method according to claim 45, wherein the Bragg gratings are substantially permanently fabricated in the interior of the optical waveguide.

49. A method according to claim 48, wherein the optical waveguide is an optical fiber.